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will require very sensitive and specific methods. Realtime RT-PCR, currently in use for other respiratory viruses primarily in research settings, may be required as a routine test in clinical diagnostic microbiological laboratories.<sup>8,9</sup>

Peiris and colleagues suggest that early therapy with intravenous ribavirin and high-dose glucocorticosteroids may be beneficial. However, the lack of untreated control patients precludes a firm conclusion about benefit. Clinicians often find it difficult to withhold potentially beneficial, yet unproven, therapy in lifethreatening situations. Controlled studies may be difficult to do and there are obviously no historical controls for the treatment of SARS. Therefore it will be important for treating physicians to carefully document the dose, timing, and types of therapies used, and the clinical and viral status of patients, so that experiences can be pooled and information productively analysed.

It is truly remarkable and unprecedented that the progress reported by Peiris and colleagues, and elsewhere, on the aetiology and clinical and epidemiological characteristics of SARS has been achieved in less than 2 months. It is fortuitous that this outbreak occurred at a time when viral surveillance-systems headed by WHO in collaboration with CDCP are in place throughout the world. The work of individual laboratories, such as the ones in Hong Kong, Toronto, and CDCP, and cooperation between health authorities in many countries provides protection from the inevitable threat of new epidemic diseases.

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## @ Guideline on management of severe acute respiratory syndrome (SARS)

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Severe acute respiratory syndrome (SARS) has recently been recognised as a newly emerging infectious disease that is highly contagious with significant morbidity and mortality. The first index case in Hong Kong was admitted on Feb 22, 2003. As of April 6, 842 cases have been identified in Hong Kong, with fatal complications in 22 patients. The outbreak has prompted the Hospital Authority of Hong Kong and the Department of Health to implement a series of public-health measures and hospital policies for the diagnosis and management of patients with SARS.

The figures are summaries of the management flowchart in the accident and emergency department for patients with a history of definite contact with SARS patients within the past 10 days (figure 1) and for patients with no such definite contact (figure 2).

The Hong Kong Hospital Authority SARS Command Centre has been established to coordinate clinical activities, including identification and reporting of cases, implementation of infection-control measures, dissemination of information to the public, development of diagnostic tests, and assessment of treatment regimens in a cluster network of hospitals. Each hospital cluster has designated treatment centres. The Hospital Authority

and the Department of Health are working collaboratively with the two universities (the Chinese University of Hong Kong and the University of Hong Kong) and with international agencies to identify the aetiological agent(s).

For details of management plans for patients in the guidelines, see: http://www.ha.org.hk

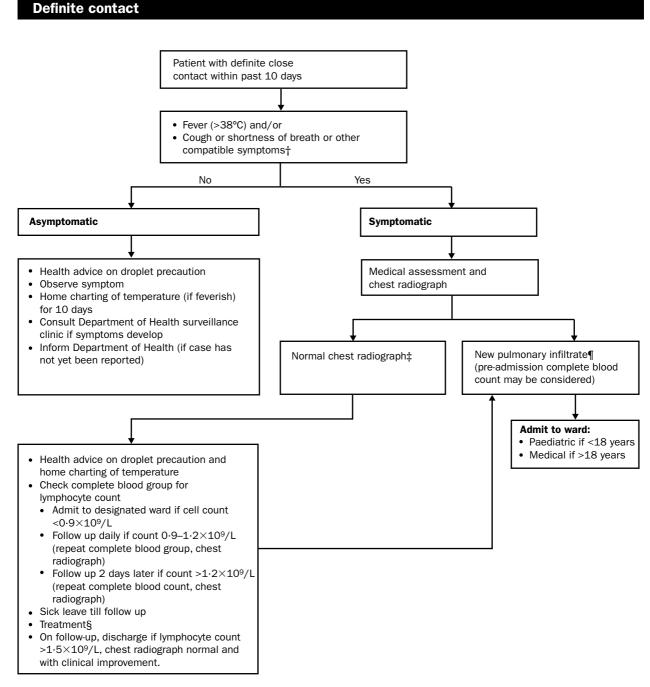
The Hong Kong Hospital Authority Working Group on SARS and Central Committee on Infection Control contributed to the guidelines. Members include physicians, microbiologists, and scientists from the Hospital Authority, Department of Health, the Chinese University of Hong Kong, and the University of Hong Kong.

The Working Group members include: Paul Chan, Y C Chan, C M Chu, David Hui, K Y Lai, S T Lai, Allan Lau, C C Lau, Y L Lau, P W Lee, C W Leung, A C H Lit, S F Lui, Y W Mok, J S M Peiris, W H Seto, Joseph J Y Sung, H K Tong, Ken Tsang, N C Tsang, Loretta Yam, W W Yan, Wilson Yee, W C Yu, and Raymond Yung.

The Central Committee on Infection Control members include: Paul Chan, Y C Chan, Patricia Ching, David Hui, Melissa Ho, S T Lai, W M Lai, Barbara Lam, Samuel Law, W K Luk, D J Lyon, Phyllis Mak, T K Ng, J S M Peiris, T L Que, W H Seto, W K To, N C Tsang, Clara Yip, and Raymond Yung.

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\*Close contact: means persons having cared for, having lived with, or having had direct contact with respiratory secretions and body fluids of person with severe acute respiratory syndrome. Social contact means persons who have had contact with person with SARS but do not fit definition of close contact. Therefore, close contacts are mainly household contacts and those who care for the case. All co-workers and all visitors of cases in hospitals are social contacts only. Only if these social contacts had direct contact with respiratory secretions and body fluids of case do they become close contact. All social contacts should be advised to attend designated medical centres only when they have one of the three symptoms: fever, cough, and shortness of breath.

†In addition to fever and respiratory symptoms, SARS may be associated with other symptoms including: headache, muscular stiffness, loss of appetite, malaise, confusion, rash, and diarrhoea.

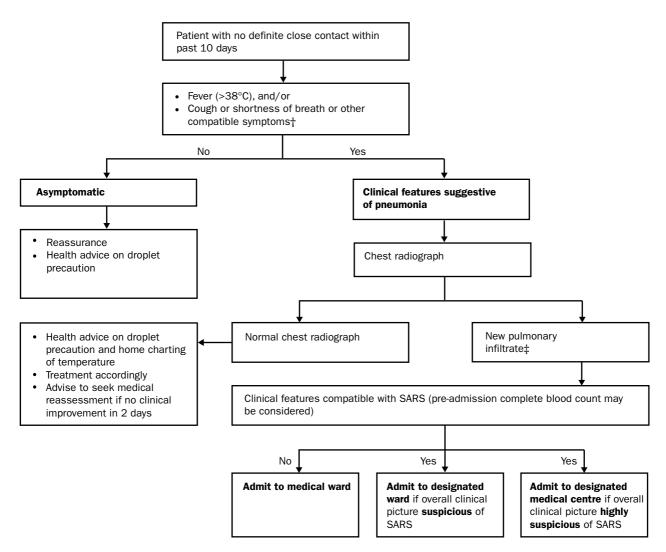
‡Consider admission despite normal chest radiograph if two or more family members have already been admitted for suspected SARS.

§Standard therapy including β lactam (co-amoxiclay or cefuroxime) and coverage for atypical pneumonia such as macrolide (clarithromycin or azithromycin) or fluoroquinolone (levofloxacin).

¶Samples of chest radiographs of SARS can be found at: http://www.droid.cuhk.edu.hk

Figure 1: Accident and emergency department management for person with definite contact\* with person with severe acute respiratory syndrome (SARS) within past 10 days

## No definite contact



<sup>\*</sup>Close contact: means persons having cared for, having lived with, or having had direct contact with respiratory secretions and body fluids of person with severe acute respiratory syndrome. Social contact means persons who have had contact with person with SARS but do not fit definition of close contact. Therefore, close contacts are mainly household contacts, and those who care for the case. All co-workers and all visitors of cases in hospitals are social contacts only. Only if these social contacts had direct contact with respiratory secretions and body fluids of case do they become close contact. All social contacts should be advised to attend designated medical centres only when they have one of the three symptoms: fever, cough, and shortness of breath.

‡Samples of chest radiographs of SARS can be found at: http://www.droid.cuhk.edu.hk

Figure 2: Accident and emergency department management for person with no definite contact\* with person with severe acute respiratory syndrome (SARS)

<sup>†</sup>In addition to fever and respiratory symptoms, SARS may be associated with other symptoms including: headache, muscular stiffness, loss of appetite, malaise, confusion, rash, and diarrhoea.